

had the species differed markedly from *capensis* in this respect. From the description of *karooensis*, I should judge that it is more nearly allied to the present species than either *oraniensis* or *capensis*.

Gastrosericus attenuatus, sp. n.

♀. Nigra, argenteo-pilosa; mandibulis (apice excepto), tibiis subtus, tarsis segmentisque dorsalibus apice testaceo-brunneis; tibiis supra tegulisque flavis; callis humeralibus flavo-marginatis; alis hyalinis, subiridescentibus, venis fusco-ferrugineis; clypeo apice subtruncato vel submarginato.

Long. 7 mm.

♀. Very near *G. silverlocki* described above, but differs in the clypeus, which is subtruncate and very shallowly emarginate at the apex; in the slenderer form; the median segment is three times as wide at the base as at the apex, only twice as wide in *silverlocki*, the first abscissa of the radius is three times as long as the second, and the eyes are a little more widely separated on the vertex, though much nearer in this character to *silverlocki* than to *laucellatus* and *capensis*. The median segment shows indistinct transverse striæ near the middle.

Hab. Volta River, Gold Coast (*G. C. Dudgeon*).

XLIII.—*New Species of Heterocera from Costa Rica.*—XV.
By W. SCHAUS, F.Z.S.

Geometridæ.

Ophthalmophora phrynearia, sp. n.

♀. Palpi and head grey-brown. Thorax and abdomen brownish grey, the latter with fine, white, segmental lines. Fore wings whitish thickly mottled with greyish brown, less so on costa; inner margin white from one-third from base, expanding gradually to tornus, where it is faintly shaded with yellowish; a faint dark brown line on discocellular; a subterminal dark brown vertical shade, not reaching costa, nor extending on white inner margin. Hind wings: base dark grey-brown, followed by a white line irrorated with silver; space beyond reddish buff, broadly clear on costa, otherwise thickly covered with brownish-grey striæ below vein 4 to termen; outer space above vein 4 clear grey-brown, containing between veins 6 and 7 a large black ocellus, edged

with buff, and containing a circle of silvery lilacine scales: the margin apically to vein 4 broadly creamy white, with silvery scales beyond ocellus, near costa, and on termen above vein 4; some faint silvery spots from vein 4 to anal angle. Underneath white: fore wings with outer margin broadly fuscous from costa to vein 2.

Expanse 31 mm.

Hab. Tuis, Carillo.

Ophthalmophora uncinata, sp. n.

♀. Head and thorax grey. Abdomen buff-grey, with pale segmental lines. Fore wings greyish, with lilacine white striæ; the costa buff-white; a white space on inner margin from one-third from base and not reaching tornus, its fore edge expanding to vein 2, then upbent to just above $\frac{1}{2}$, its outer edge curved and shaded with pale yellow, the whole outlined by a brownish shade; above the hook a vague triangular paler shade on costa; outer space from veins 4-6 also shaded with brown. Hind wings: base greyish brown, followed by a broad silvery white shade, then in and above cell to beyond middle of wing by an ochreous-buff shade; below cell and fold to termen whitish thickly striated with dark grey, and an interrupted silvery marginal line; outer space above fold dark grey, with a short reddish-brown streak close to vein 6, and a large ocellus above it, the ocellus black, containing a metallic ring, and circled with whitish buff; large clusters of metallic scales at costa, beyond ocellus, and terminally above vein $\frac{1}{2}$, above which the termen to costa is broadly creamy white. Underneath white, the outer margin of fore wing broadly fuscous, narrowing at tornus.

Expanse 30 millim.

Hab. Tuis.

Near *O. molpodiu*, Dr.

Ellopia punctularia, sp. n.

♂. Palpi fuscous. Head yellow. Body yellowish buff. Wings bone-colour. Fore wings irrorated with black points, suffusing in places and forming small fuscous patches, especially antemedially and postmedially on costa, and postmedially from veins 2-4, where the veins are shortly streaked with black; base of costa fuscous. Hind wings with fewer black spots, and short streaks postmedially on veins. Underneath slightly darker, the markings similar.

Expanse 27 mm,

Hab. Cartago.

Ellopia irrorata, sp. n.

♂. Similar to *E. punctularia*. Fore wings: the base suffused with fuscous; an antemedial, almost medial, curved thick fuscous line; a heavy fuscous shade on discocellular, suffusing with postmedial at vein 3; postmedial thick, fuscous, slightly inbent from vein 4 to just below 3. Hind wings: a well-marked postmedial line, angled at vein 4, divided by a pale line from costa to vein 3.

Expanse 28 mm.

Hab. Juan Vinas.

Ellopia vicinaria, sp. n.

♂. Palpi grey. Frons brown. Vertex yellow. Thorax dark grey. Abdomen white. Fore wings whitish bone-colour irrorated with fuscous spots and points, especially antemedially, forming a confused shade; a black spot on discocellular; a postmedial line, remote and thickest on costa, inbent from vein 5 to inner margin. Hind wings white: a black discal point; some scattered pale brownish striae. Underneath white, the markings similar.

Expanse 30 mm.

Hab. Turrialba.

Thysanopyga commendata, sp. n.

♂. Palpi and head brown, slightly reddish. Collar, thorax, and abdomen fuscous grey; anal hairs light reddish brown. Fore wings: costal margin and base buff-grey crossed by black striae; the extreme costa tinged with reddish; an antemedial thick, velvety, dark reddish-brown line across cell, inset below cell to inner margin; medial space fuscous grey with indistinct black striae; a fine dark reddish-brown medial line partly shaded with buff-brown; a small black spot on discocellular edged with white; outer line dark reddish brown incurved from vein 8 to 7, again from 7 to 2, forming a lunule from 2 to submedian, where it is angled and inbent on inner margin, faintly edged with greyish buff; space beyond outer line purplish brown, with traces of an irregular subterminal black shade; a marginal white line before apex to termen at vein 6, and a black spot at apex; inner margin from near base with very long hairs; terminal white points. Hind wings brown, shaded with fuscous grey on termen near angle; a few darker brown striae; a fine dark medial line and indistinct postmedial line; a white discal point. Underneath dull greyish brown,

with slightly darker marginal shades; black discal points; a white apical spot and tufts of long brown-black hairs on inner margin of fore wing.

Expanse 31 mm.

♀. Body and wings dull grey; white discal points. Fore wings: an antemedial dark red-brown line, thickest below cell; outer line defined by a dark red-brown space following it, the inner edge following the shape of outer line in male, its outer edge reaching the white line before apex, inbent at termen and vein 6 to below 5, then incurved and outwardly dentate to below vein 3, below which it is sinuous and partly edged with whitish. Hind wings: a fine dark brown antemedial line; a less distinct postmedial line and a vague subterminal shade. Underneath dull brownish grey, the outer margins broadly reddish brown; the white apical spot as in ♂.

Expanse 32 mm.

Hab. Cachi, Tuis, Juan Vinas.

Melanolophia funebris, sp. n.

♀. Palpi, head, and thorax mottled buff and brown, the collar somewhat darker. Abdomen buff-brown, with some darker irrorations and traces of a dorsal line. Fore wings: costa for two-thirds from base ochreous with dark striæ; base greyish with dark striæ; antemedial space fuscous, narrow on costa, expanding below cell, crossed by an indistinct curved whitish line, and another line outwardly on inner margin; medial space wide on costa, narrowing to inner margin, greyish in cell, white beyond and below cell, thickly striated with fuscous; outer third fuscous, with irregular white patches at apex and termen at vein 3, also traces of a subterminal white line and more distinct terminal line; all the markings interrupted by an ochreous shade along median and vein 3 to near termen, expanding close to cell from veins 2-4; cilia black, except between veins 3 and 4 and at apex, where it is white. Hind wings fuscous grey, the outer margin broadly darker, with traces of fine dark transverse lines; cilia white. Wings below fuscous grey, the outer margins broadly darker, except from vein 3 to tornus on fore wing; black discal spots, fore wing with white patches beyond cell, at apex, and terminally at vein 3.

Expanse 43 mm.

Hab. Juan Vinas.

Ischnopteryx parvula, sp. n.

♂. Palpi, head, collar, and thorax dark greyish olive. Abdomen above similar with some brown irrorations; a black dorsal line at base, and black dorsal points on fourth and fifth segments. Fore wings greyish olive, striated with black except adjoining lines; a black spot at base of cell; a fine black antemedial line, forming an outcurve above and below submedian, the curves inwardly edged with white; the outer line from just beyond middle of costa fine, black, outbent to vein 4, then lunular and inbent to inner margin, the lunules outwardly filled with white; a faintly brownish shade follows this line; a vague subterminal pale shade, whitish and dentate near costa, preceded and followed by black streaks near apex; a terminal black line: cilia pale pinkish with dark blotches. Hind wings fuscous: a fine black postmedial line; cilia olive-brown tipped with white. Underneath bone-colour, thinly striated with dull dark grey; the outer margins fuscous grey; the outer line less distinct on fore wing.

Expanse 31 mm.

♀. Fore wings: the antemedial line curved on costa, not extending below cell; the outer line interrupted, punctiform below vein 4, with the white shading barely visible; a black shade between the lines filling costa, cell, and space between veins 2 and 4, to postmedial; the subterminal line only visible near costa preceded and followed by black, a streak between veins 6 and 7. Underneath more thickly suffused with fuscous grey.

Expanse 35 mm.

Hab. Carillo.

Nipteria pectinata, sp. n.

♂. Palpi fuscous brown. Head and thorax brownish grey. Abdomen above light grey, ventrally white, with black segmental lines. Fore wings whitish grey, thinly scaled; costal margin thickly mottled with fuscous grey; a fuscous line on discocellular shaded with dark grey; some dark grey striæ beyond cell, and preceding the marginal dark grey shade, which expands above vein 5 to a series of short fuscous postmedial streaks on veins. Hind wings thickly irrorated with dark grey striæ, suffusing and forming a broad postmedial and marginal shade; a fuscous discal spot. Underneath similar but darker, the hind wings with striæ evenly distributed to termen; the discal spot black, the post-

medial darker, and somewhat interrupted by ground-colour and striæ.

Expanse 43 mm.

Hab. Juan Vinas.

Can be easily distinguished from other Costa Rican species of *Nipteria* by whiter colour and longer pectinations of antennæ.

Nelo tamfana, sp. n.

♂. Body above black; some white irrorations on frons; a small orange-red spot medially on collar, and a large spot on shoulders; abdomen below white with segmental black lines; white streaks on legs. Wings black. Fore wings: a large reddish-orange space from near base to beyond middle, leaving costal and inner margins narrowly black. Hind wings: a large reddish-orange spot, slightly more remote from base, leaving the costa more broadly black, and with a black streak on median and vein 2; a small orange spot on costa before apex. Fore wings below with the orange space paler; a white streak at base of costa; outer margin with interspaces at apex grey-black; a white streak between veins 3 and 4. Hind wings below black-brown, the veins darker, the markings creamy white; a costal and subcostal streak at base; a streak at end of cell above median; a streak from cell to termen between 3 and 4; a spot beyond cell from 4-6; a round spot on costa before apex; a long streak above inner margin.

Expanse 24 mm.

Hab. Juan Vinas, El Sitio.

Near *N. chrysomela*, Btl., the underside quite different.

Oospila emiuens, sp. n.

♂. Palpi and head lilacine brown, the former fringed with white; vertex behind, and collar in front, white; collar behind and patagia green; thorax and base of abdomen brownish buff; abdomen otherwise lilacine buff, thinly irrorated with black and with fine darker dorsal tufts: terminal segment, body laterally, and underneath white; legs streaked with roseate brown. Fore wings green; a black point on disco-cellular just within a buff space which extends to inner margin before middle, and to outer margin at vein 2, crossed by darker striæ, and edged with purple along green portion; a similar space terminally from vein 4 to apex, inwardly edged by a curved purplish line; a terminal purplish line from vein 2-4, and terminal brown shades from

4 to apex; the costa finely yellow. Hind wings green; some silvery white scaling at base, and a similar spot on discocellular anteriorly; a broad marginal buff-brown space from costa beyond middle to vein 4, inwardly edged by a purplish line, oblique to vein 6, then obliquely curved to vein 4 at termen; a similar smaller space at anal angle, and a narrow streak on basal half of inner margin. Wings below whitish, showing the markings of upper side in pale green and pinkish white; terminal black spots; cilia brown.

Expanse. ♂ 42, ♀ 55 mm.

Hab. Juan Vinas, Sitio, Laguna.

Trygodes amphion, sp. n.

♂. Palpi buff, laterally shaded with fuscous. Frons buff-brown shaded with fuscous. Collar fuscous shaded with reddish brown behind; some grey scaling in front and on vertex. Thorax reddish brown, the patagia shaded with lilacine buff. Abdomen lilacine buff shaded with brown. Wings lilacine brown, the lines fuscous, the spots very dark green, finely edged with black and then with buff-white. Fore wings: a large antemedial spot from median to inner margin, and an oblique fuscous line above, across cell and costa; a fuscous shade on costa at base; a large spot at end of cell, nearly quadrate, its inner edge indentate; a small spot between veins 2 and 3 at cell; a series of coalescing spots beyond cell from 3-8, those between 3 and 4, and 5 and 6 smaller; a postmedial lunular line; a subterminal lunular line followed by a fuscous shade at tornus, and from below vein 4 to above 5, the termen otherwise shaded with grey, especially at apex, and crossed by a straight brownish line from 6 to 8 near subterminal; a terminal brown line, indentate above vein 5 to vein 8; cilia buff-brown, divided by a fuscous line. Hind wings: a long spot across end of cell, and one below it to below vein 2; another spot beyond cell, widest between 4 and 5; lines and termen as on fore wing; some scattered dark irrorations on inner margin and between veins 4 and 6. Underneath pale brownish buff, the discal spots smaller, fuscous; lines more heavily marked; termen whiter; inner margin of fore wing whitish, and no antemedial spot.

Expanse 42 mm.

Hab. Juan Vinas, Tuis.

Dithadama angulata, sp. n.

♂. Palpi and head roseate brown; vertex grey behind;

a roseate brown fringe behind head. Tegulæ, patagia, and thorax grey, a fine brownish line on latter posteriorly. Abdomen dorsally violaceous brown; an angled whitish shade at base; last two segments lilacine white crossed by a segmental brownish line; lateral tufts and underneath yellowish. Fore wings pale lilacine brown; base, costa, apex, and termen pale grey; basal space limited by a brown antemedial line, deeply incurved below cell, and containing a small brown spot on costa near base; the grey on costa medially entering cell; a large irregular, darker brown spot at end of cell; traces of a postmedial darker line, chiefly beyond cell and on inner margin; a fine dark subterminal line, irregularly outbent from costa, nearly touching a fine terminal brown line between veins 5 and 3, then incurved to inner margin, separates the lilacine brown portion from terminal space, and is followed on inner margin by an upright fuscous streak; cilia whitish grey. Hind wings: a narrow whitish-grey space at base, limited by a dark brown line; antemedial space and inner margin lilacine, irrorated with purplish brown; a medial opalescent, semihyaline space, narrowest on costa and not reaching inner margin, followed by a narrow brown shade and a very irregular dark brown postmedial line, geminate near costa; postmedial followed from costa to vein 4 by a broad slate-grey shade, which becomes narrower and paler from vein 4 to inner margin at tornus; terminal area lilacine shaded with brown and crossed by a darker brown shade, almost black from costa to vein 4; a terminal brown line; cilia yellowish white, shaded with dark brown at vein 6, where the margin is slightly produced and angled. Fore wings below roseate; apex and inner margin whitish; a marginal broad black shade from vein 3 to tornus. Hind wings below luteous; a very broad black shade on outer margin.

Expanse 32 mm.

Hab. Sixola.

Superficially like *D. admirabilis*, Obt.

Dithadama delila, sp. n.

♀. Palpi and frons dark reddish brown; vertex, collar, and thorax dark grey; abdomen grey irrorated with reddish brown. Fore wings silvery grey with darker irrorations; from middle of costa to inner margin before middle a wavy maroon-red line, inwardly edged with whitish, outwardly with reddish brown, which extends almost to outer line and is interrupted by a greyish spot on discocellular, and fuscous

grey shadings on and below costa, and between veins 2 and 4; outer line remote, fine, whitish, inwardly shaded with reddish brown, outwardly oblique from costa, with a pointed angle at vein 6, then outcurved to near termen at vein 3, and incurved to inner margin; a marginal fuscous shade from vein 6, narrowing to vein 2 and expanding below it; a terminal black line interrupted by grey points at veins. Hind wings: base narrowly grey, then reddish brown to outer line, with a fuscous-brown streak on discocellular, outwardly pale-edged; outer line maroon-red, irregular, outwardly shaded with whitish; a subterminal olive-grey shade; termen whitish, with the terminal black line as on fore wing. Fore wings below silky reddish, the inner margin white. Hind wings below whitish, with a postmedial and a subterminal reddish shade.

Expanse, ♂, 19-27 mm.

Hab. Sixola, Esperanza, Juan Vinas.

Near *D. adela*, Dogn.

Haemalea punctilinea, sp. n.

♂. Body above and wings salmon-buff; a transverse dark streak on second segment of abdomen; cilia brown with fuscous streaks at veins; a fine terminal fuscous line. Fore wings: costa fuscous; antemedial white points on veins, inwardly oblique from costa, the point nearest to it surrounded with fuscous; a black point on discocellular; a postmedial outcurved series of white points on veins, those near costa edged with fuscous; a terminal brown shade at vein 4; a fuscous spot at tornus extending just above vein 2. Hind wings: a black point on discocellular; postmedial white points faintly outcurved. Body below whitish. Fore wings below tinged with pale salmon, the apex whitish; the costa and termen narrowly fuscous; a subapical interrupted fuscous line. Hind wings below whiter, the termen more broadly fuscous; minute black discal points on both wings.

Expanse 21 mm.

Hab. Juan Vinas.

Polypætes albilinea, sp. n.

♀. Palpi, head, and thorax dark brown; abdomen fuscous brown above and ventrally; broad lateral brownish-yellow lines and sublateral black lines. Fore wings dull brown, the veins brownish yellow; a white medial line, inbent just below cell at vein 2 and outangled below submedian fold; a subterminal greyish-brown shade. Hind wings thinly scaled

smoky brown-grey, the veins finely yellowish; a dull yellow space below cell from base to before middle, and not extending on abdominal fold.

Expanse 39 mm.

Hab. Turrialba.

Tithraustes phaëthon, sp. n.

♂. Palpi fuscous, the base orange. Body above black; grey lines on frons; orange scales on shoulders; a lateral white line on abdomen; abdomen below white. Fore wings fuscous, the veins paler; cell very short; veins 3 and 4 on long stalk; faint whitish streaks beyond cell from vein 3-8; before apex a whitish fascia from 4-8 cut into spots by veins. Hind wings black; a white space from base in and above cell, expanding below cell to near vein 3, and leaving outer margin broadly black, the costa very narrowly black. Fore wings below with the white markings more pronounced. Hind wings below as above, but the inner margin rather broadly white.

Expanse 34 mm.

Female differs in having only a small whitish spot beyond cell.

Expanse 42 mm.

Hab. Juan Vinas, Sitio, Tuis.

Pyralopsis damalis, sp. n.

♂. Palpi and body above bright yellow; abdomen with a black dorsal line on third, black spots on following segments, increasing in size terminally, and separated by whitish segmental lines; a sublateral black line; ventrally creamy white. Fore wings bright yellow, the outer third olive-black crossed by buff-white veins; costa finely black; the yellow space terminating in a straight line on costal margin, outcurved below it. Hind wings deeper yellow, the outer margin black. Underneath similar, the black margin of hind wings also cut by pale veins.

Expanse 38 mm.

Hab. Juan Vinas.

Near *P. homalochroa*, Feld.

Phaechlona crocearia, sp. n.

♂. Body orange; a dorsal black line on abdomen. Fore wings fuscous brown; a bright yellow space from base to beyond middle, leaving costa finely dark, and also space

below fold, which is, however, streaked with yellow on inner margin and on submedian; a semihyaline patch on yellow space beyond cell. Hind wings bright yellow; the outer margin rather broadly black, partly interrupted by a yellow streak above anal angle. Fore wings below with yellow space extending to inner margin.

Expanse 25 mm.

Hab. Sixola.

Oricia domina, sp. n.

♀. Body and wings bright yellow; abdomen dorsally shaded with fuscous on last segments. Fore wings: a fuscous line from costa at three-fourths from base, obliquely out-curved to submedian, along which it continues to near base; terminal space brownish grey. Hind wings: the outer margin narrowly black, and narrowest at vein 4. Fore wings below: outer margin fuscous, widest on costa.

Expanse 34 mm.

Hab. Limon.

Near *O. truncata*, Wlk.

[To be continued.]

XLIV.—*Descriptions of new Species of Pyralidæ of the Subfamily Pyraustinae.* By Sir GEORGE F. HAMPSON, Bart., F.Z.S., &c.

[Continued from p. 336.]

(7 b) **Nacoleia rectistrialis*, sp. n.

Head, thorax, and abdomen white; palpi above and third joint, and basal joint of antennæ black; tegulæ white with black dorsal stripe; pro- and metathorax with black bands; legs with brownish stripes; abdomen with black segmental bands dorsally confluent on terminal segment. Fore wing white; the costal area black-brown; streaks on median nervure and veins beyond the cell to the postmedial white line brown; an oblique fascia from base of inner margin to vein 2 near origin; an elliptical black-edged annulus in middle of cell with traces of another below it and a discoidal lunule; the postmedial line minutely dentate, oblique from costa to vein 5, then slightly bent outwards to vein 2, then very oblique to middle of inner margin; terminal area black-brown, the cilia with a series of white points. Hind wing black-brown; a broad oblique medial white band with black